Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Sections 74.1203(a)(3) and	)	RM No. 11786
74.1204(f) of the Commission's Rules to	)	
Protect Local Radio Service Provided by	)	
Fill-In Area FM Translators	)	

REPLY COMMENTS OF COMMUNICATIONS TECHNOLOGIES, INC.

Introduction

Communications Technologies, Inc. ("CTI") herein submits its Reply Comments in the above captioned Proceeding wherein Aztec Capital Partners, Inx. ("Aztec") has asked the Commission to consider changes to its present Part 74 Rules which provide protection to listeners of both full service and secondary FM broadcast stations. CTI is a broadcast engineering consulting firm formed in 1985 and which has practiced before the FCC continuously since its inception. During that time period the firm has filed hundreds of FCC applications for construction permit and license for both FM full service and FM translator and booster transmission facilities. Determination of actual interference and coverage has been a core part of this work and is the underlying basis for this proceeding.

Review of Petition

Aztec Capital Partners, Inc. ("Aztec") has asked the Commission to modify Part 74 of the rules with regard to interference caused by a translator to regular listeners of both FM full service and FM translator stations. Our summation of the filing is that it is a request by an AM licensee asking for the FCC to modify its rules to make it easier to obtain an FM translator CP and license. Below is an analysis of a core portion of Aztec's request as we understand it.

Page 3 item 2, Aztec states that it is asking for a proposed fill-in translator application for CP to be granted and the translator signal protected in the community of license of the primary station. Aztec in effect is stating that the new translator should be insulated from having to protect the existing over the air service of a FM station that happens to be located inside the community of license of the AM station for which fill-in operation is proposed. It is believed that the FCC never before has been asked to designate a portion of an FM radio station's listenable service area as no longer eligible for protection from interference due solely to that area being inside the community boundary of the primary AM station.

The Comments of Clear Communications point to the core problem with this proposal:

> "Aztec's proposed rule changes would strip away the ability of stations to protect their existing listenership by depriving them of the right to oppose or even comment on the resulting modification of a station's license. In effect, the proposed rule changes make fill-in translator applicants primary and all other stations secondary."

Other Commenters suggest that the FCC establish more specific standards and CTI supports that proposition:

> Ben Downs, "Requiring interference complaints to originate from within a particular contour seems a good solution to reduce abuse of the rules."

> Alpha Media, LLC et al May 18th filing, "Reforms to the complaint process for FM translator interference are best considered in a rule making proceeding focused on specific reforms that respect the secondary status of FM translators, not in a rule making based on Aztec's ill-conceived and self-serving proposal."

Reality

Our firm is located in the suburbs of Philadelphia in Southeast, NJ and, as such, we have the luxury of being particularly familiar with real world signal levels and conditions in the region where this dispute takes place. We have seen more than one other application filed for an AM fill-in translator in this market where unique propagation characteristics were not recognized and the translator permittee built the translator only to have to turn it off due to interference to an existing

FM station loss of existing audience. The solution to the interference problem is found in two places based on our experience.

First, by approaching FM fill-in translators in a practical and well researched manner. Just because the FCC opens a translator filing windows doesn't mean that there is open spectrum for a new translator for every AM station. AM station licensees need to understand this reality.

There is another aspect to this reality. We have been fortunate to shoe horn translators into some large markets around the country but sometimes that requires a very narrow beam width antenna to keep from interfering with existing off-air service and a coverage contour that is only a small percentage of the market. Yes, the translator may cover hundreds of thousands of persons in the 60 dBu but when the market and the AM station 2 mV/m contour includes many millions of people just how much service to the public is actually associated with the FM translator and how valuable will that service be to the AM licensee? Does this end up being an exercise in frustration?

WHAT's W260CZ translator CP (BMPFT-20170410AAD) is a case in point. There are 674,048 persons in the predicted 60 dBu but only 533,100 persons are inside the WHAT city of license, Philadelphia, Pennsylvania, which has a 2010 census population of 1,526,006 persons. Why should the WHAT fill-in translator be protected in the entire city of Philadelphia boundary when neither the translator or the AM cover the entire city? Under Aztec Application BMPFT-20170608ABI, a reduction in ERP from 250 watts to 50 watts is proposed for W260CZ. That application reduces population to 419,724 persons in the predicted 60 dBu but only 390,806 persons are inside the WHAT city of license, Philadelphia, Pennsylvania. This hopefully helps to explain one aspect of the inequity associated with the Aztec proposal. Please see Figure 1, attached. If the W260CZ translator is ultimately licensed at 50 watts it will reach 25.6% of the population in the city of Philadelphia. How valuable is that service to WHAT?

Suggested Solutions

It is our belief that people preparing the technical portion of an application for FM translator need to put more effort into determining, especially in regard to co-channel cases, where existing stations are predicted to enjoy a viable signal and actually have a listener base. One of the best ways to do that is to get the AM station engineer and programming people out in the field to listen on the frequency or frequencies that are being considered and choose a frequency where there is truly no regularly listenable signal anywhere in the predicted area to be served by the translator

at a minimum. Propagation tools such as Longley-Rice are also an excellent supplement to direct locals as to where an interference problem might occur. It would be helpful if applicants were required to provide a due diligence certification in their application for construction permit that such an analysis was undertaken.

Perhaps of greater long-term importance would be the FCC's adoption of a standard tool designed to determine coverage and interference between FM stations. The ratio method of evaluating coverage and interference in grid blocks was developed many years ago by the FCC Office of Engineering Technology as found in OET Bulletin No. 69. The following link describes the methodology which was used successfully in the initial repacking of the U.S. television band for DTV.

https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet69/oet69.pdf

In 2017, the FCC released updated OET-69 software for the Incentive Auction in a new program called TVStudy. That software is being used by engineers today and in the next few years as the basis for DTV facilities specified in applications for construction permit to change DTV channels.

https://www.fcc.gov/oet/tvstudy

It should be noted that FCC OET software program TVStudy has an FM interference module built-in. To the best of our knowledge that has not been widely tested by broadcast engineers. However, a tool like this, provided by the FCC and properly tested, could be an excellent "go/ no-go" tool to predict impermissible interference using the existing Part 74 criteria.

Conclusion

We believe that the proposal filed by Aztec would do more harm than good and could result in a large coverage losses for the public. Such a result is certainly not in the Public Interest. It is our belief that the industry would be better served, and scarce FCC resources preserved for productive purposes, if clear guidelines were put in place regarding the identification of existing service areas as a short-term solution. In the longer term, studying the use of an OET-69 based tool to provide uniform interference and coverage calculation would serve the FCC and the industry well.

Respectfully submitted,

Communications Technologies, Inc.

By: _____

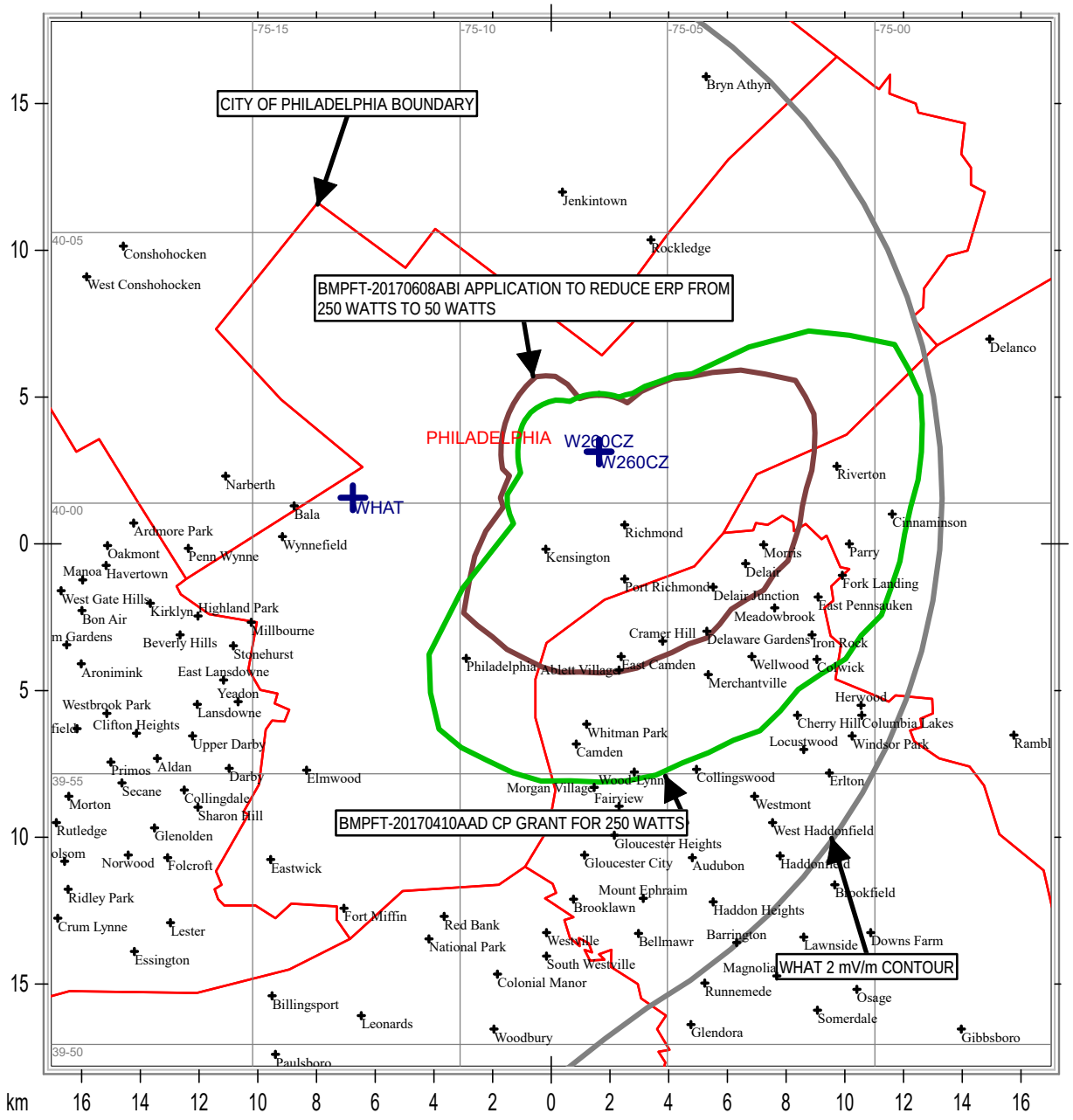
Clarence M. Beverage

By: _____

Laura M. Mizrahi

June 14, 2017

WHAT(AM) PHILADELPIA, PA AND W260CZ FILL-IN TRANSLATOR



Communications Technologies, Inc. Marlton, New Jersey

County Borders Lat/Lon Grid

Map Scale: 1:225000 1 cm = 2.25 km V|H Size: 35.59 x 34.06 km **Figure 1**